Installation Instructions
for the Rolltec®
Adalia X3M Plus™ Awning

Questions? Call Rolltec®
at 1-800-667-0474

Table of Contents
Available installation brackets 2
Side dimensions of various installations 3
Determining installation height and coverage 4
Positioning installation brackets 5
Mounting wall brackets to surface 6
Attaching and operating the awning 7
Installation of the protective hood (optional) 8
Loop attachment and leveling the awning 9
Slope adjustment instructions 10

General Tool Requirements

- Hammer drill
- Masonry bit set
- Drill bit 3/16” (for 3/8” lag bolts) or 1/4” (for 1/2” lag bolts) if mounting on surface that requires pilot holes
- 13mm socket (for securing square bar in mounting brackets)
- 5mm Allen key (for hood brackets)
- 8mm wrench (level the awning)
- Phillips driver #2 (for hood end plates)
- Ladders
- Level
- Chalk line

Supplied: Installation wall brackets. Other brackets available upon request.

Not Supplied: Anchors, lag bolts, or mounting screws for installation. We recommend 3/8” lag bolts with washers and corresponding anchors.

Notes
When mounting a retractable awning, it is extremely important to take into consideration the type of building surface you will be installing on. Whether the building’s exterior is stucco, siding or brick, it is imperative to install the mounting brackets in a correct manner, to properly secure the awning to the building’s surface.

A retractable fabric awning is designed to provide shade and light rain protection*, and should be retracted during heavy rain, snow, or severe wind conditions.

* A Minimum of 15° slope is required, and should be used under proper care.
Available Installation
Brackets for the Adalia X3M Plus™

**Wall Bracket**
Extruded aluminum with a powder coated finish. For flat surface mounting, such as brick, wood, or siding.

**Universal Bracket (optional)**
To be used for installations under the soffit. Can be used individually or in combination with rafter brackets.

**Rafter Bracket (used in combination with universal brackets, optional)**
Rafter brackets are made of steel with a white powder coated finish. They are available in 4 sizes, and must be used in combination with a ceiling bracket.
Side Dimensions for Various Installations

**Installation on wall**

- 9.6” (243mm)
- 2.1” (52mm)
- 5.8” (148mm)
- 11.5” (292mm)

**Installation on wall with optional protective hood**

- 10.1” (258mm)
- 10.4” (263mm)
- 12.9” (328mm)

**Installation under overhang**

- 10.2” (259mm)
- 4.9” (125mm)
- 12.8” (326mm)

**Installation under overhang with rafter brackets**

- 10.7” (271mm)
- 5.9” (151mm)
- 8” (203mm)
- 8” (203mm)

When mounting under a soffit, make sure that the back edge of the ceiling bracket is at least 11” from the front edge of the roof. This protects the retracted awning from weather elements.

Bolt only 3 holes (2 holes if trusses are 2x4) of the rafter bracket to the center of the roof truss, the wood might crack if all 4 holes are bolted.
Determining Installation Height and Coverage

The horizontal coverage of an awning is determined by the length of the arms and the angle of the awning. Arms come in several standard sizes, and the angle can be adjusted.

<table>
<thead>
<tr>
<th>Horizontal Coverage</th>
<th>Angle</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5°</td>
</tr>
<tr>
<td>5'4&quot;</td>
<td>5'4&quot;</td>
</tr>
<tr>
<td>6'9&quot;</td>
<td>6'8&quot;</td>
</tr>
<tr>
<td>8'8&quot;</td>
<td>8'7&quot;</td>
</tr>
<tr>
<td>10'0&quot;</td>
<td>9'11&quot;</td>
</tr>
<tr>
<td>11'8&quot;</td>
<td>11'6&quot;</td>
</tr>
</tbody>
</table>

**NOTE**: In order to use an awning for light rain protection, it must be installed with a 15° slope or greater.

### Tables for Various Arm Sizes and Angles

<table>
<thead>
<tr>
<th>Suggested Installation Height</th>
<th>Angle</th>
<th>Vertical Drop</th>
<th>Angle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arm Size</td>
<td>5°</td>
<td>10°</td>
<td>15°</td>
</tr>
<tr>
<td>5'4&quot;</td>
<td>8'1&quot;</td>
<td>8'7&quot;</td>
<td>9'0&quot;</td>
</tr>
<tr>
<td>6'9&quot;</td>
<td>8'2&quot;</td>
<td>8'9&quot;</td>
<td>9'4&quot;</td>
</tr>
<tr>
<td>8'8&quot;</td>
<td>8'4&quot;</td>
<td>9'1&quot;</td>
<td>9'10&quot;</td>
</tr>
<tr>
<td>10'0&quot;</td>
<td>8'5&quot;</td>
<td>9'4&quot;</td>
<td>10'2&quot;</td>
</tr>
<tr>
<td>11'8&quot;</td>
<td>8'7&quot;</td>
<td>9'7&quot;</td>
<td>10'7&quot;</td>
</tr>
<tr>
<td>Arm Size</td>
<td>5°</td>
<td>10°</td>
<td>15°</td>
</tr>
<tr>
<td>5'4&quot;</td>
<td>1'1&quot;</td>
<td>1'7&quot;</td>
<td>2'0&quot;</td>
</tr>
<tr>
<td>6'9&quot;</td>
<td>1'2&quot;</td>
<td>1'9&quot;</td>
<td>2'4&quot;</td>
</tr>
<tr>
<td>8'8&quot;</td>
<td>1'4&quot;</td>
<td>2'1&quot;</td>
<td>2'10&quot;</td>
</tr>
<tr>
<td>10'0&quot;</td>
<td>1'5&quot;</td>
<td>2'4&quot;</td>
<td>3'2&quot;</td>
</tr>
<tr>
<td>11'8&quot;</td>
<td>1'7&quot;</td>
<td>2'7&quot;</td>
<td>3'7&quot;</td>
</tr>
</tbody>
</table>

**NOTE 1**: The table of suggested installation heights uses 7" of headroom below the front valance. To calculate the installation height for a different amount of headroom, use the table of vertical drops and add to your preferred headroom:

**INSTALLATION HEIGHT = HEADROOM + VERTICAL DROP**

**NOTE 2**: The Adalia X3M Plus™ awning allows you to change the inclination of the awning at any time. This model is ideal for applications with low headroom, as you can install the awning lower than the suggested installation height (see above) and adjust the arms to a shallower slope. In the event of light rain, you can lower the slope accordingly.

### Brackets in Relation to Awning Width

<table>
<thead>
<tr>
<th>Arm Size</th>
<th>Number of Installation Brackets</th>
<th>Awning Width</th>
</tr>
</thead>
<tbody>
<tr>
<td>5'4&quot;-10'0&quot;</td>
<td>2</td>
<td>18&quot;</td>
</tr>
<tr>
<td>11'8&quot;</td>
<td>n/a</td>
<td>19&quot;-20&quot;</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Arm Size</th>
<th>Number of Installation Brackets</th>
<th>7'-10'</th>
<th>11'-13'</th>
<th>14'-15'</th>
<th>16'-17'</th>
<th>18&quot;</th>
<th>19'-20&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>5'4&quot;-10'0&quot;</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>11'8&quot;</td>
<td>n/a</td>
<td>4</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Positioning Installation Brackets

Refer to these illustrations when determining the positions of installation brackets. See the next page for step-by-step installation instructions.

Fig.1: Awning with 2 Arms and 2 or 3 Brackets

Brackets that are placed on the outside of the arm shoulder (bracket 1 and 2 in all the illustrations) should be as close to the arm shoulder as possible, up to 12”.

Brackets placed inside the arm shoulder (bracket 3 or 4 in Fig.2) should be 12” to 24” from the arm shoulder.

NOTE: There should be a bracket on the outside of the shoulder whenever possible! If not, place the bracket inside as close to the arm shoulder as possible.

It is important to properly secure the installation brackets to the surface. The weight of the awning, added pulling forces and aerodynamic lifts (when the awning is extended) are creating considerable stress on the installation brackets.

Expected stress values are factored into the number of brackets shipped with an awning. However, it is assumed that the awning will be installed on a solid surface. When installing on a weaker surface, it is recommended to use additional brackets to spread the load. Extra brackets are available on request, for a small added charge.
Mounting Wall Brackets to Surface

NOTE: Check to see that the wall is flat and even. If it is not, it is advisable to mount the brackets on a cedar wooden board first. The brackets can be attached to the board with carriage bolts, before the board is mounted on the wall. Use a 2"x10" board; if the awning has a protective hood use a 2"x12".

**Step 1. Draw a Horizontal Line**

Chalk a horizontal line at the optimum installation height (as determined on page 4). The level of the line corresponds to the level of the bottom installation screw. This step is not necessary if installing on brick.

**Step 2. Mark Where to Drill Holes**

Align a wall bracket so that the chalk line goes through the middle of the bottom hole (A). If installing on brick, make sure that both holes are on brick and not mortar (fastening an awning to mortar will cause it to loosen over time).

Use a level to make sure that the bracket is upright (B).

Use a pencil to draw a line down the middle of the small visible wall area through the bottom hole. Keeping the bracket in place, draw a pair of perpendicular lines that intersect in the centre of the top hole. C illustrates the resulting marks.

**Step 3. Drill Holes and Attach Outside Brackets**

After marking the locations of drill holes for the two outside brackets, drill the holes and attach them loosely.

**NOTE:** If a protective hood is to be used, the hood brackets should be installed together with the wall brackets (D).

**Step 4. Align and Attach Remaining Brackets**

Align the remaining wall brackets with respect to the two outside ones. They will need to be able to fit and support installation bar, and good alignment is important.

Once you are satisfied with the alignment, tighten all screws firmly and check that each bracket is attached solidly to the surface.
Attaching and Operating the Awning

Attaching the Awning

1. Make sure that both your hands and the working area are clean.

2. Remove the awning from the protective sleeve. **Do not use a knife**, as you risk damaging the fabric.

3. Slide awning square bar into the mounted brackets. Use a 13mm socket and the supplied bolts to secure the square bar inside the brackets.

The procedure is identical for both wall and ceiling installations.

Extending and Retracting the Awning

**Manual Operation**

Start by attaching the crank by hooking it through the loop in the gear mechanism, as shown.

For a **right side** crank (pictured), turning the crank counter-clockwise will extend the awning, and turning clockwise will retract it. For a left side crank, it’s the other way around.

You will know that the awning has fully extended once the fabric becomes slightly slack. When this happens, turn the crank in the opposite direction just enough for the fabric to go back to being taut.

When retracting from a fully extended position, the first turn or two can offer a fair amount of physical resistance. This is normal and should not cause alarm.

**Motorized Operation**

Use the supplied electrical 3-way control (switch or remote) to operate your awning. The **UP** button is to close the awning, and the **DOWN** button is to open the awning. The middle button lets you stop the awning partway. If you adjust the slope, you might have to adjust the limit switches on your motor. Also, resetting the limit switches on your motor is recommended after the first few months of use, as awning fabric has a tendency to stretch. Please refer to instructions supplied with the motor or contact Rolltec®.
Installation of the Protective Hood (Optional)

**Structure of a Protective Hood**

The hood is manufactured in two pieces: a female part, and a male part. The female part holds a PVC weather strip. This strip goes against the wall, eliminating the need for caulking.

The two parts joined as shown, and hold together mainly with gravity. The three small grooves in the hood are screw holes, and are used in attaching side cover plates. The remaining two grooves (which are significantly larger), are used to fit the hood onto hood brackets.

Hood brackets are usually installed at the same time as wall brackets (see page 6, Fig.D), but can be added later. Remember that hood brackets must go in front of the wall brackets, but behind the washers of the screws securing the brackets to the wall.

**NOTE:** A protective hood is optional, but it comes very highly recommended when the awning is installed on a flat, exposed surface. If the awning is equipped with an electric motor and there is no overhang shielding the awning from the elements, a hood is mandatory. A hood cannot be used in conjunction with ceiling brackets.

**Fitting a Hood onto Hood Brackets**

Each hood bracket comes with two tongues that fit into the large grooves on the underside of the protective hood. The hood is slid on after the brackets have been installed.

Afterwards, the screw shown in the picture on the left should be tightened.

**NOTE:** A protective hood can be installed before or after mounting the awning onto the wall brackets.
Inserting Shaft with Loop into Inclination Arm Shoulder

If your awning was shipped, the shaft with the loop will come separately from the inclination arm shoulder. Follow these simple steps for assembly.

**Step 1.** Insert the hexagonal shaft into the opening on the bottom of the inclination arm shoulder (see A).

**Step 2.** Using an 8mm wrench, secure the shaft in place with a small hex head screw (see B). Screw is included in the package.

---

Leveling Your Awning

After your awning is installed, please check if front of the awning is levelled when fully extended. If you need to adjust the level, follow these steps.

**Step 1.** Begin by identifying the arm shoulder **without** a loop (see C). Using an 8mm wrench, remove hex head screw from the side of the arm shoulder.

**Step 2.** Pull out the “shaft with plug” from the bottom of the arm shoulder. Sometimes turning the loop on the opposite side assist in removing this shaft.

**Step 3.** Continue by moving to the opposite arm shoulder **with** the loop (see D). Using the crank, turn this loop left or right until the awning becomes levelled.

**Step 4.** Put back the “shaft with plug” which you removed in step 2 and secure it with a hex head screw.
Slope Adjustment Instructions

1. Extend or retract the awning until it is approximately halfway between full extension and full retraction.

2. Thread the manual crank into the loop under one of the arm shoulders.

3. Rotate the crank until the awning reaches the desired slope.